

What is claimed is:

1. An interrogation apparatus for reading a transponder, comprising:

an antenna portion operable to transmit an interrogation signal to the transponder
and to receive a data signal from the transponder;

5 a processing portion operably interconnected to said antenna portion operable to
receive the data signal, determine a data format of the data signal, determine the presence
or absence of body characteristic data within the data signal, and when the presence of
body characteristic information is detected, decode the data signal to obtain said body
characteristic information; and

10 an output portion operable to output, when the presence of body characteristic
information is detected, said body characteristic information.

2. The interrogation apparatus for reading a transponder, as claimed in Claim 1,
wherein said processing portion is further operable to determine the presence of absence
of identification information within the data signal, and when the presence of
identification information is detected, decode the data signal to obtain said identification
5 information; and

wherein said output portion is further operable to output said identification
information when the presence of identification information is detected.

3. The interrogation apparatus for reading a transponder, as claimed in Claim 1, wherein said processing portion is operable to detect at least two different formats of data within said data signal and operable to detect the presence or absence of temperature information within each format of data.

4. The interrogation apparatus for reading a transponder, as claimed in Claim 1, wherein said data format conforms to an existing standard for transmission of identification information from a transponder to an interrogator.

5. The interrogation apparatus for reading a transponder, as claimed in Claim 1, wherein said data format conforms to ISO standard 11785.

6. The interrogation apparatus for reading a transponder, as claimed in Claim 5, wherein said data format is FDXA.

7. The interrogation apparatus for reading a transponder, as claimed in Claim 5, wherein said data format is FDXB.

8. The interrogation apparatus for reading a transponder, as claimed in Claim 1, wherein said output portion includes a display.

9. The interrogation apparatus for reading a transponder, as claimed in Claim 1, wherein said output portion includes a connection to an external storage medium.